BUREAU OF AUTOMOTIVE REPAIR

SPECIFIC LANGUAGE OF PROPOSED REGULATIONS

1.) Section 3351.6 is added to Division 33 of Title 16 of the California Code of Regulations to read:

§3351.6. Equipment Requirements for Automotive Air Conditioning Repair Dealers

All Automotive Repair Dealers engaged in the service or repair of automotive air conditioning systems in vehicles covered by the Act shall be subject to the following minimum requirements.

An automotive repair dealer that is performing service or repair to motor vehicle's air conditioning system shall have all repair, measuring, testing and refrigerant recovery equipment and current reference manuals necessary to service or repair the system, including but not limited to:

- (a) Refrigerant identification equipment that meets or exceeds current Society of Automotive Engineers (S.A.E.) standards.
- (b) Refrigerant leak detection equipment that meets or exceeds current Society of Automotive Engineers (S.A.E.) standards.
- (c) Refrigerant recovery equipment that meets or exceeds current Society of Automotive Engineers (S.A.E.) standards.
- (d) Low and high pressure gauges for the purpose of measuring pressure in a mobile air conditioning system. As a minimum, the low pressure gauge shall be capable of measuring from zero to thirty inches of vacuum Hg, and zero to 250 pounds of pressure per square inch (psi). As a minimum, the high pressure gauge shall be capable of measuring from zero to 500 pounds of pressure per square inch (psi).
- (e) An air conditioning system vacuum pump. When connected to a sealed automotive system, the pump shall be capable of reducing system pressure to a minimum of 29.5 Hg (inches of vacuum) measured on the low pressure gauge at sea level.
- (f) A thermometer capable of testing air conditioning system efficiency. As a minimum, the thermometer shall be capable of measuring air temperatures from 20 to 100 degrees Fahrenheit.

Authority and Reference: Sections 9880.1 (a) and (3), 9882, 9884.7 (1)(g), 9884.8, 9884.9, 9884.17 and 9884.19 Business and Professions Code; and Sections 12000 and 12001 of the Vehicle Code

2.) Section 3366 is added to Division 33 of Title 16 of the California Code of Regulations to read:

§3366. Automotive Air Conditioning

All Automotive Repair Dealers engaged in the repair of automotive air conditioning systems in vehicles covered by the Act shall be subject to the following minimum requirements. The words "Service", "Inspection", "Diagnosis", "Top off", "Performance Check" or any expression or term of like meaning, when used in association with automotive air conditioning systems, shall only be used when the following minimum work is done:

(a) VISUAL INSPECTION - Engine Compartment

- (1) Examine the exterior of all hoses and tubing connections for deterioration, blistering, bubbling refrigerant, oil stains and battery acid damage or burns. Check these hoses and connections for incorrect routing, rubbing, missing hardware or loose hoses, bent or collapsed tubing.
- (2) Examine the compressor exterior for damaged or missing bolts/hardware, broken housing or oil stains. Rotate the compressor 2 complete turns by hand to determine if seized or locked up.
- (3) Examine the compressor clutch for broken springs, burnt face, damaged grooves or oil stains from a seal leak.
- (4) Check the size and thread of the service ports to determine type of refrigerant confirm with engine compartment label. Examine the ports for missing caps, damaged threads and leaking Schrader valves.
- (5) Check the condenser for loose or damaged connections, loose or missing hardware or air dams. Examine the condenser coil for bent or damaged fins, restrictions due to debris/dirt, or oil stains.
- (6) Examine the expansion device (if accessible) for physical damage or oil stains.
- (7) If equipped, check the Pilot-Operated absolute Valve (POA),

 Evaporator Pressure Regulator (EPR), Suction Throttling Valve
 (STV) for physical damage or oil stains.
- (8) Check the cabin air filter (if equipped) for physical damage, oil stains and for proper installation.
- (9) Check the accumulator or receiver/drier for physical damage, loose or missing hardware, loose connections or oil stains. Examine the receiver/drier sight glass for stains.

- (10) Check the air conditioning drive belt system for missing or damaged pulleys or tensioners, and for proper belt routing, tension, and alignment. Examine the condition of the belts for cracking, checking or excessive wear.
- (11) Examine all connections, i.e., o-rings, gaskets, spring locks (if equipped), not previously inspected for loose or missing parts and oil stains.
- (12) Check the in line filter for physical damage or oil stains.
- (13) Examine the fan clutch for fluid leakage or excessive bearing wear.

 Check the radiator fan for damaged or bent blades.
- (14) Examine electrical connectors for loose, burnt, broken or corroded parts. Examine the wiring harness for burns, cracks or rubbing on insulation.

(b) VISUAL INSPECTION - Passenger Compartment

- (1) Check all air distribution louvers for directional movement and airflow.
- (2) Check all blower speeds and controls for proper movement and function. Check control head operation for heater, defrost and air conditioning.
- (3) Check evaporator/heater case for water leakage. Check carpet for water damage.

(c) LEAK CHECK (ENGINE OFF)

- (1) Identify the refrigerant in use and detect flammables, unknown or contaminated refrigerant. Record refrigerant identification on invoice.
- (2) Connect manifold gauge refrigerant pressure must read 50 psi or more. Add refrigerant to increase the pressure if necessary.
- (3) Clean all connections using a clean dry rag.
- (4) Start at the compressor discharge port and follow the flow of refrigerant through the system with a leak detector. Move the detector sensor completely around each connection.
- (5) Leak-check the underside of the hoses, clean and leak-check the condensate drain tube(s).

- (6) Leak check the compressor shaft seal.
- (7) Leak check the evaporator through nearby dash vents.

(d) PERFORMANCE EVALUATION (ENGINE ON AND AIR CONDITIONING ON)

- (1) Check the compressor clutch for proper operation.
- (2) Check blower motor at all speeds.
- (3) Check operation of function control doors for fresh air and recirculating air.
- (4) Check operation of heater flow control, if so equipped.
- (5) Check the engine cooling fan for proper operation in accordance with manufacturers specifications.
- (6) Verify that the high and low-side system pressure is in relation to manufacturer's specification, and record the readings on the final invoice.
- (7) Verify that the air temperature at the center air distribution louvers is in relation to manufacturer's specification, and record the reading on the final invoice.
- (8) Verify that the temperature controls are operating properly.

Authority and Reference: Sections 9880.1 (a) and (3), 9882, 9884.7 (1)(g), 9884.8, 9884.9, 9884.17 and 9884.19 Business and Professions Code; and Sections 12000 and 12001 of the Vehicle Code